# Controlling Invasive Plants on your property

District of Saanich Environmental Services 770 Vernon Avenue Victoria, BC V8X 2W7



This brochure provides information for Saanich residents to identify and control invasive plants on private lands.

### What are invasive plants?

Invasive plants are non-native plants that spread quickly and negatively affect the habitats they invade. They have been introduced outside their natural range, lack natural controls and out-compete other plants. Invasive plants not only impact native ecosystems, but may also pose risks to human and animal health as well as having economic impacts such as to agriculture, infrastructure and recreation.

### Invasive plants in Saanich

Most invasive plants familiar to the public are well-established in the region (like Scotch Broom and English Ivy) or commonly escaping from gardens (like Periwinkle and Yellow Archangel). It is important to control these plants from further spread and impacting native ecosystems and neighbouring properties. There are also other lesser-known plants which can still be eradicated or stopped from gaining a foothold in Saanich, such as Giant Hogweed and Blessed Milk Thistle.

#### Saanich residents can help by:

- Controlling invasive plants on their properties
- Eradicating new, high priority invasive plants
- Keeping invasive plants on their properties from spreading to adjacent lands
- Learning more about invasive plants and planting only non-invasive species
- Reporting sightings of new invaders www.saanich. ca/invasives
- Volunteering your time to help control invaders www.saanich.ca/pullingtogether

# www.saanich.ca/invasives

Saanich Invasive Plant Management categories: Prevent, Eradicate, Contain and Control.

#### Other invasive plants in our region

The District of Saanich is working with regional and provincial partners to address new plant introductions and other plants that are particularly harmful to people or animals. Addressing new threats quickly is the most effective way to safeguard natural systems and the community from invasions.

Visit www.saanich.ca/invasives for factsheets, contacts, and more information on invasive plants.

New invaders (Eradicate List) Find out which plants are new to the area and are the focus of eradication efforts.

Garlic Mustard

Noxious invaders Learn about plants that are noxious to humans and/or animals.

Giant Hogweed

Widespread invasives (Contain and Control Lists) Find out about other plants that have spread in the region that can no longer be eradicated.

Purple Loosestrife

Plants to watch for (Prevent List) Learn about plants that may be coming our way.

Kudzu







## SCOTCH BROOM

(Cytisus scoparius)

### Why is Scotch Broom a problem?

Scotch Broom is an aggressive invader in our region, especially in open or disturbed ecosystems. Broom is successful because it fixes nitrogen, is drought and cold tolerant, and builds up a long-lived 'seed bank' in the soil. Scotch Broom quickly fills in open areas, forming dense stands and choking out native plants.

## How do I recognise it?

- Form: upright deciduous shrub, up to 3 m in height;
- Leaves: alternate and small (reduced to spines and scales on older plants);
- Flowers: bright yellow, pea-like, sometimes tinted with orange;
- **Seed pods:** green, ripening to black, slightly hairy and flattened;
- **Branches:** green and spindly on young plants, tough woody stems on mature plants.

## When and how should I remove it?

Scotch Broom is best removed beginning in late summer, after native wildflowers have gone dormant but before its seed pods begin to open. Removal at this time will stop the addition of new seeds to the soil and may have the advantage of killing drought-stressed plants. Broom cut during wetter months may survive to re-sprout the following season. Removal can continue through to early winter, though care must be taken to stop work once native bulbs begin sprouting through the earth. If the soil is moist and the stems are pencil width or smaller, broom plants can be pulled easily from the ground by hand. Larger plants should be cut below the root crown using loppers or a pruning saw. When removing Scotch Broom, it is important to avoid disturbing the soil which can stimulate dormant broom seeds to sprout.

#### Disposal

Broom that is piled up and left on-site will leach toxins into the

soil and suppress native plant growth in the vicinity. To avoid spreading seeds, load the broom onto a tarp and use this to carefully remove plants from the work site. Home composting is not recommended. See the back of this brochure for disposal of cut plants.

More information on best management practices: www.goert.ca/publications\_resources/invasive\_species.php



# ENGLISH HOLLY

(llex aquifolium)

## Why is English Holly a problem?

English Holly is a popular ornamental tree that is now established in natural areas. Holly out-competes native vegetation for light, nutrients and water. It spreads through suckering from the roots, sprouting where branches touch the ground, or by birds that eat its berries.

#### How do I recognise it?

- Form: evergreen tree with spreading branches up to 15 m tall;
- Leaves: alternate, glossy, dark green, spiky and evergreen;
- Flowers: small and white;
- **Berries:** poisonous, red, on female trees in winter;
- Bark: green on young plants, smooth and grey on mature plants;
  - Also known as Christmas Holly
    - because of its decorative use.



Young holly plants look similar to native Oregon-grape, which has yellow flowers, blue berries, and somewhat duller leaves, sometimes with a reddish tinge. Unlike holly leaves, Oregon-grape leaves grow opposite to one another.

#### When and how should I remove it?

Ideally, holly should be removed while it is still young and not yet producing berries. Pull young plants from moist soil, or cut them if soil is dry. Remove mature trees and saplings by cutting them below the root crown. Avoid soil disturbance. As with other invasive shrubs or trees, monitor the cut stumps for signs of re-sprouting.

**Disposal** Holly spreads by seed dispersal so care should be taken to contain berries when disposing of fruiting trees. Load the cut holly onto large tarps and use these to carry plant material from the worksite. Home composting is not recommended. See the back of this brochure for disposal options.

# ENGLISH IVY

(Hedera helix)

## Why is English Ivy a problem?

English Ivy is a highly successful invader that thrives in our mild climate. Ivy often forms thick mats of vegetation that smother low-growing native plants. Ivy also climbs up tree trunks and forms such a dense cover that the tree is concealed from view. The weight of the vines and leaves make the tree more vulnerable to breaking or toppling over in windstorms. Ivy growth can also weaken or kill a tree by reducing its exposure to light and thus limiting its ability to photosynthesize. English Ivy grows quickly (up to 4 metres per year) and is spread by birds that eat its seeds.

#### How do I recognise it?

- Form: a vigorous evergreen vine found growing as ground cover, or climbing;
- Leaves: waxy, dark green with three to five lobes (young plants) or unlobed oval-shaped leaves with a pointed tip (mature plants);
- **Flowers:** small and greenish-white;
- **Berries:** poisonous, shiny and blue-black in colour.

### When and how should I remove it?

Heavy infestations of English Ivy are difficult to eliminate and realistic control plans must include persistence and repeated site visits. The first priority should be to remove ivy from standing live trees. Although ivy stems can grow to a large diameter, they can be cut with loppers, pruning saws, or hatchets. Cut all vines in a complete strip around the trunk from ground to chest height, then pull or cut ground-growing vines around the base of the trunk. Leave the upper vines to decay on the tree and remove them once the foliage has died back. Use a small pry bar to break away smaller stems from the trunk, taking care not to damage the tree's bark. Never remove ivy from dead trees as it can be hazardous to do so. Ivy growing on the ground can be removed by pulling vines and digging roots from the soil. It is best to work from the outside edge of the patch inwards to contain the spread.

**Disposal** Most ivy re-growth occurs from roots left in the soil but cut stems and leaves can also regenerate. Take precautions with ivy berries, which contain seeds that will readily sprout. Use heavy-duty garbage bags or tarps to remove all ivy from the worksite. Home composting is not recommended. See the back of this brochure for disposal options.



# HIMALAYAN BLACKBERRY

(Rubus armeniacus)

#### Why is Himalayan Blackberry a problem?

Himalayan Blackberry is a widespread and aggressive invasive plant that can quickly turn naturally open areas into dense thickets of impenetrable brambles. Blackberry thickets suppress growth of native vegetation through shading and build up of heavy loads of leaf litter and dead stems. Himalayan Blackberry spreads by its roots and canes and is widely dispersed by berry-eating birds.

#### How do I recognise it?

- **Form:** a trailing shrub with thick, thorny stems or canes reaching 10 m or more in length;
- Leaves: large (up to 20 cm in length), divided into five toothed leaflets, dark green above and pale greyish-green below;
- Flowers: white to pinkish and five-petalled;
- **Berries:** edible, deep black-purple when ripe.

#### When and how should I remove it?

Be sure you can tell the difference between the non-native and native blackberries before starting removal. Native Trailing Blackberry is a trailing vine with slender stems and deciduous leaves formed of three dark green leaflets. The best approach is to remove Himalavan Blackberry before it becomes established in an area. Wear thick clothing to protect yourself from sharp thorns. Pull or cut the canes from the ground before they produce berries. Canes that are cut as the plant is producing flowers are least likely to re-sprout. If possible dig out the roots, paying careful attention not to damage nearby vegetation.

#### Disposal

Remove plant material from the work site to avoid re-sprouting, seed germination and to rid the area of debris from leaves and stems. Home composting is not recommended. See the back of this brochure for disposal of cut plants.



## SPURGE-LAUREL or DAPHNE

(Daphne laureola)

## Why is Spurge-laurel a problem?

Spurge-laurel, also called Daphne, is a highly invasive ornamental shrub. The plant and its berries are poisonous to people and most animals. Unfortunately, some birds can eat the berries and are effective at spreading its seeds.

How do I recognise it?

- **Form:** a small evergreen shrub (to 1.8 m in height) reminiscent of a rhododendron;
- **Leaves:** glossy, dark green, leathery, elongated and oval in shape;
- **Flowers:** greenish-white, grow in clusters among the leaves near the top of the stem;
- Berries: shiny black, slightly egg-shaped.
- CAUTION: The leaves, bark, sap and berries of this plant are poisonous.



#### When and how should I remove it?

Always wear gloves when handling Spurge-laurel because it produces a noxious substance which can cause severe eye and skin irritation. Never transport Spurge-laurel cuttings or plants inside an enclosed vehicle because the noxious compounds can also cause respiratory irritation.

Pull small plants from moist soil. Cut larger plants just below the soil, year round. Spurge-laurel stems may re-sprout after cutting and numerous seedlings may germinate so repeated site visits are necessary.

Disposal Spurge-laurel spreads via seeds so cut plants should be wrapped in tarps for removal to avoid distributing berries to new sites. Home composting is not recommended. See the back of this brochure for disposal options.

## **ENGLISH HAWTHORN**

(Crataegus monogyna)

#### Why is English Hawthorn a problem?



English Hawthorn is an introduced, invasive deciduous shrub or tree which spreads by suckering and seeds into forest and open fields. This species forms dense, thorny thickets, outcompeting other vegetation and altering native ecosystems.

How do I recognize it?

- Form: Deciduous shrub or tree with straight thorns (1-2 cm) on branches;
- Leaves: alternate, long-stalked, lobed leaves;
- Flowers: white to pink flowers in mid-spring;
- Berries: Red berries ripen in late fall.

**Note:** the native Black Hawthorn (*C. Douglasii*), has blackish-purple berries with thick leaves that are less lobed.

#### How should I remove it?

Outside native ecosystems, cut close to the base, carefully remove the roots if possible. If roots remain, fray or torch the remnants or annually cut any re-growth. Contact Environmental Services for information regarding treating large populations.

#### **Disposal** Hawthorn can grow from root suckering, cuttings and seed dispersal, so careful removal of all these parts should be planned. Load cut Hawthorn onto large tarps to remove from the worksite. Home composting is not recommended. See the back of this brochure for disposal options.



## GOOD NEIGHBOURS

While Saanich has a climate preferred by many people, it is also a climate where a higher diversity of invasive plants can thrive. The spread of non-native, invasive plants from private gardens/yards causes negative impacts to neighbouring properties and local ecosystems. Saanich encourages residents to be good neighbours by keeping species like these from spreading beyond their property. Some species may also be listed in the Noxious Weed Bylaw and require control.

#### Some example species of concern include:



Butterfly Bush Buddleja davidii



Yellow Archangel Lamium galeobdolon



Goutweed Aegopodium podagraria



Cotoneaster Cotoneaster horizontalis



Cyclamen Cyclamen hederifolium



St. John's Wort *Hypericum calycinum* 



Bindweed Convolvulus spp.



#### Protect the environment

Control of invasive plants is important, but caution should be used to protect native ecosystems. Good practices include:

- Having a plan for long-term control
- Assessing natural areas prior to removal
- Consulting with experts for assistance before working on ecologically sensitive sites
- Using best management practices for invasive removal
- Taking care not to damage the ecosystem you are working in, (such as minimizing soil disturbance and working on invasives in the dormant season if possible)
- Monitoring the effects of the invasive removal
- Seeking permission before removing invasive plants from local parks and public areas

Please note that pesticide use in Saanich on private properties is restricted and requires a permit. See www.saanich.ca/pesticide for more information.

#### Safety first

When removing invasive plants, pay careful attention to your surroundings. This is important especially when working on steep slopes and around dead trees. Always wear appropriate safety equipment and have a first aid kit nearby, particularly if you are working with groups of volunteers.

Remember many invasive plants contain toxins and can irritate the skin. Always wear appropriate protective gear.



Invasive plants are proficient at spreading to new areas, so plan

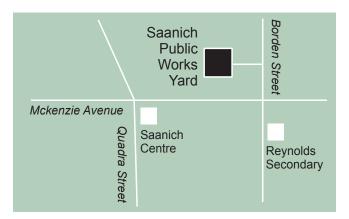
disposal as carefully as removal. Transport plant debris carefully (such as in sealed bags) to avoid spreading seeds or leaving behind roots or stems that can re-sprout. Please dispose of all plant material at an approved site.

#### Hartland Landfill

1 Hartland Avenue

www.crd.bc.ca/service/waste-recycling/hartland-landfill-facility Most invasive plants are exempt from the yard and garden waste ban for the landfill. Simply bag and tag "invasive plants" and dispose directly in the landfill (disposal fee). This is currently the safest way to dispose of invasive plants.

Saanich Garden Waste Disposal 1040 McKenzie Avenue www.saanich.ca/services/garbage Phone: 250-475-5595



This option is only recommended for invasive species in this brochure and if there are no seeds in the material.

The District of Saanich is in the process of developing a protocol for handling and disposing of invasive plant species that are removed from private lands. Please contact Environmental Services for up-to-date information on proper removal and disposal techniques.

## District of Saanich

Environmental Services 250-475-5471 planning@saanich.ca www.saanich.ca/invasives For information on best management practices, factsheets, community education, reporting new invaders, and invasive plant control on private lands.

#### Saanich Parks

250-475-5522 parks@saanich.ca To report invasive plants on public lands.

Pulling Together Volunteer Program saanich.ca/volunteers

#### Other Resources

Invasive Species Council of British Columbia bcinvasives.ca

**Provincial Program** www.for.gov.bc.ca/hra/plants

#### **Coastal Invasive Species Committee**

coastalisc.com

**F-Flora BC** eflora.bc.ca

Garry Oak Ecosystems Recovery Team goert.ca

King County Noxious Weed Control Program kingcounty.gov/environment

Provincial Report-a-Weed hotline reportaweed.ca / 1-888-WEEDSBC

# www.saanich.ca/invasives

5th Edition 2017, Printed On 100% Recycled Paper Photos: T. Carnahan, M. Croteau, N. Dechaine, C. Richman, K. Mulhern, A. Pollard, D. Polst Scott, University of Georgia; David J. Moorhead, University of Georgia, Bugwood.org, Ken